

IN THE CLAIMS

Please amend the claims as follows:

1-49. (Cancelled)

50. (Previously Presented) A method comprising:

splitting a first field and a second field of a frame of a video signal into a plurality of segments, a particular segment of the plurality of segments having no overlap with other segments of the plurality of segments and being adjacent to at least one of the plurality of segments; and

modulating at least one first field segment of the plurality of segments of the first field and at least one second field segment of the plurality of segments of the second field with auxiliary data by altering the pixel value of the plurality of pixels of the first field segment and the second field segment,

wherein at least one second corresponding field segment in the second field that corresponds to the first modulated field segment is not modulated, at least one first corresponding field segment in the first field that corresponds to the second modulated field segment is not modulated, and the plurality of pixels in a corresponding field segment of a field of the frame that correspond to the plurality of pixels in a particular modulated field segment of the other field of the frame have a different pixel value based on the modulating of the first field segment and the second field segment.

51-55. (Cancelled)

56. (Currently Amended) A method comprising:

optically obtaining a frame of a video signal from a display device on a hand-held electronic device;

seeking and synchronizing to a vertical retrace period of the video signal on the hand-held electronic device; and

determining on the hand-held electronic device, whether auxiliary data is present in the frame by performing a field comparison on a plurality of segments of a first field and a plurality of corresponding segments of a second field ~~for~~ of the frame based on the seeking and synchronizing to the vertical retrace period,

wherein at least one second corresponding field segment in the second field that corresponds to a first modulated field segment is not modulated, at least one first corresponding field segment in the first field that corresponds to a second modulated field segment is not modulated, and a plurality of pixels in a particular corresponding field segment of a particular field of the frame that correspond to the plurality of pixels in a particular modulated field segment of the other field of the frame have a different pixel value.

57. (Previously Presented) The method of claim 56, wherein the field comparison includes:

subtracting intensity of the plurality of corresponding segments of the second field from the plurality of segments of the first field,

subtracting the intensity of the plurality of segments of the first field from the plurality of corresponding segments of the second field, or
combinations thereof.

58. (Currently Amended) The method of claim 57, further comprising:

decoding a logic one as the auxiliary data when a particular segment of the first field is encoded and a corresponding segment of the second field is not encoded; and

decoding a logic zero as the auxiliary data when the particular segment of the first field is not encoded and the corresponding segment of the second field is encoded.

59. (Currently Amended) The method of claim 57, further comprising:

decoding a logic one as the auxiliary data when a ~~corresponding~~ particular segment of the second field is encoded and a corresponding segment of the first field is not encoded; and

decoding a logic zero as the auxiliary data when the ~~corresponding~~ particular segment of the second field is not encoded and the corresponding segment of the first field is encoded.

60-71. (Cancelled)

72. (Previously Presented) The method of claim 57, further comprising:
providing a benefit to a user based on the determining of the auxiliary data.

73. (Previously Presented) The method of claim 72, wherein the benefit is textual information, a prize, a coupon, a game, a special access privilege, or combinations thereof.

74-81. (Cancelled)

82. (Currently Amended) The method of claim 56, wherein the seeking and synchronizing to the vertical retrace period of the video signal comprises:

seeking a first display section of a picture presented on a display device is black;

waiting ~~a sufficient~~ an amount of time for a vertical refresh of the picture to occur on the display device;

determining if a second display section of the picture presented on the display device is black;

~~looking~~ seeking beyond the first display section when the picture presented on the display device for the second display section is not black; and

locking on a vertical retrace period when the second display section is black.

83. (Currently Amended) The method of claim 82, further comprising:
releasing the ~~lock~~ locking on the vertical retrace period after a few seconds.

84-92. (Cancelled)

93. (Previously Presented) The method of claim 50, wherein the plurality of segments is split into equal sized segments.
94. (Previously Presented) The method of claim 50, wherein the pixel value is intensity.
95. (Cancelled)
96. (Currently Amended) The method of claim 50, wherein a particular segment of the plurality of segments of the first field and the second field represents a bit of data.
97. (Cancelled)
98. (New) A method comprising:
seeking a first display section of a picture presented on a display device is black;
waiting an amount of time for a vertical refresh of the picture to occur on the display device;
determining if a second display section of the picture presented on the display device is black;
seeking beyond the first display section when the picture presented on the display device for the second display section is not black;
locking on a vertical retrace period when the second display section is black;
optically obtaining a frame of a video signal from the display device; and
determining whether auxiliary data is present in the frame by performing a field comparison on a plurality of segments of a first field and a plurality of corresponding segments of a second field for the frame based on the locking on the vertical retrace period.
99. (New) The method of claim 56, wherein a particular segment of the plurality of segments has no overlap with other segments of the plurality of segments and is adjacent to at least one of the plurality of segments.

100. (New) The method of claim 50, wherein a number of the plurality of segments is four.